

Managing Sino-U.S. Air and Naval Interactions: Cold War Lessons and New Avenues of Approach

by Mark E. Redden and Phillip C. Saunders



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Cover: Crewmember on Chinese trawler uses grapple hook in apparent attempt to snag towed acoustic array of USNS *Impeccable* in the South China Sea, March 2009. *Impeccable* was conducting routine survey operations in international waters 75 miles south of Hainan Island when it was harassed by five Chinese vessels.

(AP Photo/U.S. Navy)

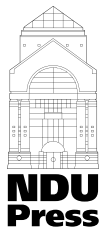
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Executive Summary

The United States and China have a complex, multifaceted, and ambiguous relationship where substantial areas of cooperation coexist with ongoing strategic tensions and suspicions. One manifestation involves disputes and incidents when U.S. and Chinese military forces interact within China's Exclusive Economic Zone (EEZ). Three high-profile incidents over the last decade have involved aggressive maneuvers by Chinese military and/or paramilitary forces operating in close proximity to deter U.S. surveillance and military survey platforms from conducting their missions. Why do these incidents continue to occur despite mechanisms designed to prevent such dangerous encounters? Could new or different procedures or policies help avoid future incidents?

The problem in the U.S.-China case lies not with inadequate rules (for maritime operations) or history of practice (for air operations), but rather in the motivations that sometimes drive the Chinese to selective noncompliance with their provisions. China regards military surveillance and survey operations in its EEZ as hostile, threatening, illegal, and inappropriate. China's harassment of U.S. naval vessels and aircraft conducting surveillance and survey operations is intended to produce a change in U.S. behavior by raising the costs and risks of these operations.

The U.S. military has confronted this problem before. U.S. doctrine and operational practice in conducting and responding to surveillance operations derives primarily from Cold War interactions with the Soviet military. The two countries were eventually able to develop a mutually beneficial protocol, known as the Incidents at Sea Agreement (INCSEA), for managing air and naval interactions, thereby reducing the potential for an incident to occur or escalate. Given the success of INCSEA and tactical parallels between U.S.-Soviet and U.S.-China interactions, the factors that led the Soviet Union to seek an agreement provide a useful prism for evaluating the current situation.

Three primary factors motivated the U.S.-Soviet agreement: concern over the escalation potential of future incidents, a growing parallelism in the nature and scope of surveillance operations, and a burgeoning period of détente. These factors do not presently exist in the U.S.-China relationship to the degree necessary to induce mutual restraint in maritime and air interactions within China's EEZ. This situation may change over the next 10 to 15 years as Chinese global economic interests expand and naval modernization produces a more capable and active Chinese navy, but waiting for change is not an attractive solution given continuing operational risks and the potential for an incident to badly damage bilateral relations.

If U.S. policymakers seek a faster change in Chinese behavior, they need to understand the underlying Chinese policy calculus, how it may change over time, and potential means of influencing that calculus. Based on Chinese policy objectives, official statements, patterns of behavior, and logical inferences, we identify seven decisionmaking variables:

1. Sovereignty/security concerns: These reflect China's historical concerns about sovereignty and the economic importance of defending China's coastal provinces.
2. Intelligence/counter-intelligence: China needs to gather strategic and tactical intelligence and also seeks to limit intelligence collection by potential adversaries.
3. Geostrategic considerations: China has concerns about the U.S. role in Asia, needs a stable external environment that supports development, desires to shape international rules and norms, and seeks to project a positive international image.
4. Chinese domestic context: Aggressive efforts by Chinese naval and maritime forces to defend sovereignty bolster their relative importance and justify increased resources. However, the Chinese navy also seeks to show that it can protect China's interests and safeguard China's economic development, missions that require cooperation with foreign militaries.
5. Global commons access: Assured access to the global economy for resources and to reach markets is essential for continued Chinese economic growth and development.
6. Escalation control: China shares an interest in preventing interactions with U.S. military assets from escalating into a broader conflict, but Chinese leaders and officers tend to regard the risk of such escalation as limited and manageable.
7. Relations with the United States: A constructive relationship with the United States is important for China's continued economic development and ability to achieve its national objectives, but Chinese leaders downplay the likelihood of a military incident causing irreparable damage to bilateral relations.

U.S. policymakers have several broad avenues of approach to alter the Chinese policy calculus and thereby influence Chinese behavior:

1. Intelligence/counter-intelligence approaches: These approaches link China's own ability to gather intelligence with its tolerance of U.S. intelligence-collection activities. Options include creating direct parallels between U.S. operations in China's EEZ and Chinese operations in Japan's EEZ; linking Chinese tolerance of U.S. surveillance operations in

its EEZ with U.S. tolerance of select Chinese intelligence-collection activities in other areas or using other means; and linking the frequency of U.S. surveillance operations to Chinese concessions or cooperation in other areas.

2. Maritime cooperation/coercion: These approaches play on the distinction between contentious U.S.-Chinese interactions within China's EEZ and more cooperative interactions in distant waters. Cooperative options include highlighting the value of agreed operational norms and expanding U.S.-China maritime cooperation, including via surveillance cooperation in support of counterpiracy operations; coercive options include responding to Chinese harassment with "tit for tat" actions against Chinese navy ships or commercial shipping outside China's EEZ.
3. Geostrategic and bilateral considerations: These approaches play on Chinese geostrategic interests in maintaining a stable regional environment and a U.S.-China relationship conducive to economic and social development. Options include a more structured, consistent, and sustained U.S. strategic communication plan that highlights international norms of airmanship and seamanship; drawing parallels between the rights of military units to conduct operations in EEZs under the freedom of navigation principle and the more general issue of commercial access to the global commons; and challenging the Chinese assumption that military incidents inside China's EEZ are unlikely to escalate into broader conflict or seriously threaten bilateral relations.

Given the importance that China places on sovereignty, no single option is likely to be sufficient. A mixed approach, particularly one that influences more Chinese decisionmakers, may maximize the probability of success. Cooperative approaches require time for benefits to accrue and for normative arguments to be heard and heeded. Some potential coercive approaches require violating preferred U.S. norms of freedom of navigation and U.S. military standard practice of safe airmanship and seamanship to generate the leverage necessary to alter Chinese behavior. This risks shifting international norms in undesired directions and would create greater tension and friction in military-military relations and bilateral relations generally.

This study does not attempt to weigh the intelligence value of U.S. operations in China's EEZ against their negative impact on U.S.-China relations or the costs of the coercive options identified above. U.S. policymakers will need to carefully consider whether the status quo is tolerable, the costs and risks of various approaches, and what mix of policies might move China in desired directions at an acceptable cost.

Introduction

The United States and China have a complex, multifaceted, and ambiguous relationship where substantial and expanding areas of cooperation coexist with ongoing strategic tensions and suspicions. China's rising economic and military power raises concerns in the United States about how a stronger China will behave. Chinese leaders describe a "trust deficit" that impedes bilateral cooperation; some believe the United States is encircling China and seeking to contain its rise. Mutual suspicions and the competitive elements of the relationship have deepened in the last few years.¹ One specific manifestation of these competitive dynamics involves disputes and incidents when U.S. and Chinese military forces are operating in close proximity in the Western Pacific, and especially when U.S. aircraft and ships are operating in China's Exclusive Economic Zone (EEZ).*

Over the last 10 years, three sets of high-profile incidents involving U.S. surveillance and military survey platforms operating within China's EEZ have highlighted this issue:

- the April 2001 collision between a U.S. Navy EP-3 aircraft and a People's Liberation Army Navy Air Force J-8 fighter
- the USNS *Bowditch* incidents in March 2001 and September 2002
- the USNS *Impeccable* and USNS *Victorious* incidents in 2009.

All three incidents involved aggressive maneuvers by People's Liberation Army Navy (PLAN) and/or paramilitary (Bureau of Maritime Fisheries Patrol and State Oceanographic Administration) forces operating in close proximity to U.S. surveillance and military survey platforms to deter U.S. assets from conducting their missions. The incidents occurred within China's EEZ, which all but a handful of countries regard as international waters and airspace under the United Nations Convention on the Law of the Sea (UNCLOS).² Chinese intercepts of U.S. military and military support units operating within China's EEZ are routine, but the provocative and dangerous nature of China's actions during these three sets of episodes makes them stand out.

In the case of the EP-3 incident, the Chinese pilot's maneuvers resulted in a collision that damaged the EP-3 and resulted in the loss of the Chinese aircraft and its pilot. Each incident significantly raised tensions between the two militaries and disrupted military-military cooperation (in the EP-3 case, military-to-military contacts were suspended for more than a year).

*Under the United Nations Convention on the Law of the Sea, coastal and island states have special rights over the exploration and use of marine resources within their EEZ. An EEZ ordinarily extends 200 nautical miles from a country's coast (unless that zone overlaps with the EEZ of another country). Islands capable of sustaining life can also generate an EEZ. China has not formally delineated its EEZ, partly due to unresolved territorial disputes.

High-profile U.S.-China Military Incidents, 2001–2009



Disputes over these U.S. operations have been an ongoing source of friction in the military-to-military relationship; a major incident could seriously damage the overall bilateral relationship.

Moreover, these episodes have occurred despite a number of mechanisms designed to lessen the chances of dangerous encounters between U.S. and Chinese units. Both countries are party to multilateral and bilateral arrangements that have codified “rules of the road” and have established

communication protocols intended to minimize the risks associated with air and maritime units operating in close proximity to each other. A number of formal military-to-military dialogue regimes provide venues to address and rectify the causes of such incidents. Given that mechanisms exist to prevent dangerous interactions, why do they still occur? Is it due to shortcomings in the protocols, or is it an issue of conditional compliance? If it is a compliance issue, what motivates China to deviate from established international rules and norms? Whatever the cause of the problem, could new or different procedures or policies help avoid future incidents?

This is not the first time that U.S. defense planners and the U.S. military have confronted this problem. U.S. doctrine and operational practice in conducting and responding to surveillance operations derive primarily from Cold War interactions with the Soviet military. The current U.S.-China relationship is much more cooperative and positive than the U.S.-Soviet Cold War confrontational dynamic, but tactical-level interactions between the militaries are similar in many respects. At the most fundamental level, both involve provocative, and at times dangerous, posturing of military units to support larger political objectives. After an extended period of risky episodes during the Cold War (which included loss of aircraft and personnel, and damage to ships), the United States and Soviet Union were eventually able to develop a mutually beneficial protocol for managing air and naval interactions, thereby reducing the potential for an incident to escalate.

The 1972 Incidents at Sea Agreement (INCSEA) provided tactical procedures and an arbitration mechanism that proved invaluable in reducing the number and severity of confrontations between U.S. and Soviet forces. Given the success of INCSEA and the tactical parallels between the U.S.-Soviet and U.S.-China incidents, INCSEA and the factors that led the Soviet Union to seek an agreement provide a useful prism for evaluating the current situation.

The first part of this paper examines existing international protocols and argues that they should be sufficient to prevent U.S.-China incidents. The underlying issue is a disagreement over the interpretation of what military activities are permitted within EEZs and China's willingness to use risky behavior to discourage these U.S. operations. The second section examines factors behind the successful development and implementation of the U.S.-Soviet INCSEA agreement, focusing on factors that might apply to the U.S.-China case. This paper does not presuppose that an INCSEA-like agreement is appropriate or necessary for the current situation. Rather, it looks at why and how the United States and Soviet Union decided to reduce the risk associated with their interactions in international waters and airspace and in the third section examines the extent to which those factors might be relevant to U.S.-China maritime interactions. The fourth section lists Chinese interests potentially affected by U.S.-China maritime interactions. The final section identifies eight approaches that the United States might employ to alter the Chinese

calculus that harassment of U.S. military forces in its EEZ is an effective policy tool. Although the analysis does not produce a “point solution” that can resolve the issue, it identifies some approaches that might redirect maritime interactions down a path toward diminished risk, with attendant benefits for the overall bilateral relationship.

This paper does not address in detail the multitude of legal arguments and opinions offered by both the United States and China regarding U.S. operations in China’s EEZ and Chinese reactions to them.³ These legal maneuverings are tools used by each side to further their respective political-military objectives. The root cause of the difficulty does not lie in the legal realm, but rather in the political-military realm. The paper also does not consider undersea activities and what may or may not have occurred between the United States and Soviet Union in this domain.⁴

Existing Norms and Rules for Maritime and Air Interactions

A first step in identifying why risky incidents are occurring between U.S. and Chinese military and paramilitary units is to determine if shortcomings exist in the protocols designed to prevent such incidents. In addition to higher level, formal security dialogues such as the Strategic Security Dialogue, Defense Consultative Talks, and Defense Policy Coordination Talks, there are at least three maritime regimes that provide means to control interactions between U.S. and Chinese units. On the bilateral level, there is the Military Maritime Consultative Agreement (MMCA), an initiative formalized in 1998 “to reduce the chances of confrontation between the two militaries in the air and on the sea.”⁵ The MMCA periodic working group sessions, attended primarily by senior field-grade and junior flag-rank officers, in many ways mirror the INCSEA working group format. A key difference between the two structures is that MMCA is “vaguer, lacking the detailed ‘rules of the road’ provisions found in the earlier accord.”⁶ This has produced differing expectations on what MMCA can and should achieve. For the United States, the focus is primarily on the development of tactical-level deconfliction procedures; for China, MMCA is a venue to address broader political-military issues.

In addition to MMCA, the United States and China participate in two multilateral protocols designed to deconflict maritime operations. The first is the Code for Unalerted Encounters at Sea (CUES), a product of the Western Pacific Naval Symposium.⁷ CUES is a vehicle “by which navies may safeguard and advance their rights, duties, freedoms and responsibilities, develop mutually rewarding international cooperation and transparency and provide leadership and broad-based involvement in establishing international standards in relation to the use of the sea.”⁸ With respect to deconfliction mechanisms, the 2003 CUES Review Supplement offers

“safety measures and a means to limit mutual interference and uncertainty and facilitate communication when naval and public ships, submarines or aircraft make contact.”⁹ CUES is voluntary in nature and does not carry the same authority as an international treaty or agreement; as such, it is not binding on participating countries. CUES also suffers from lack of an arbitration mechanism. The Review Supplement specifically states that the Western Pacific Naval Symposium “will not arbitrate disputes arising from incidents between warships, submarines, public vessels or naval aircraft or from the use of this document.”¹⁰ Responsibility for arbitration is left to the individual states.

The other relevant maritime program is the Convention on the International Regulations for Preventing Collisions at Sea (COLREGs). Promulgated by the International Maritime Organization, COLREGs are international maritime rules of the road designed to eliminate collisions between all vessels operating on the high seas.¹¹ It carries legal authorities not contained within the Western Pacific Naval Symposium and CUES.

For the air domain, the situation is more problematic. Universally agreed and codified procedures covering interactions of military aircraft in international airspace do not exist. International Civil Aviation Organization (ICAO) rules are explicitly formulated for the civil aviation sector and also address interactions between civil and state aircraft (defined as military, customs, and police aircraft).¹² ICAO procedures for aircraft intercepts only cover state aircraft intercepts of civil aircraft; no ICAO provisions address state-state aircraft interactions in international airspace.

What does exist is a community of practice developed over decades that provides a precedent for potential use in the U.S.-China situation. The case of the United States and Soviet Union/Russia, particularly following INCSEA implementation, offers a good example. “Due regard for the safety of forces” is a fundamental tenet by which the United States, North Atlantic Treaty Organization countries, and Russia operate when their military aircraft are in close proximity. “Due regard” is most acute in situations where smaller, maneuverable fighter-type aircraft operate in proximity to larger, less maneuverable platforms (a situation typical of intercepts of surveillance aircraft and representative of the vast majority of U.S.-China air interactions). U.S. officials have occasionally commented on the aggressive nature of Chinese intercepts of U.S. aircraft, but the sheer number of U.S. flights and stated intercepts¹³ conducted without incident or comment indicate some degree of acknowledgment, and use, of the basic tenets of professional airmanship and due regard on the part of PLA Air Force and naval aviation units and their pilots.¹⁴

Despite their individual limitations, MMCA, CUES, and COLREGs, taken as a whole, provide sufficient clarity to prevent dangerous encounters in the maritime domain by military and other state assets. The three programs contain a robust set of overlapping rules and procedures

that mitigate shortfalls in the individual programs. They produce a comprehensive, interconnected set of controls that in principle provide the United States and China satisfactory tools to deconflict maritime operations. The air domain is less codified, but a community of practice and a history of compliance with due regard on the part of the Chinese demonstrate that deconflicted operations can be conducted in this area as well. The problem lies not with the rules (for maritime operations) or history of practice (for air operations), but rather in the motivations that sometimes drive the Chinese to selective noncompliance with their provisions. Understanding these motivations requires a deeper look at each country's perspective on surveillance operations.¹⁵

From the U.S. standpoint, military operations (and more specifically surveillance operations) within China's EEZ are part of a broader military strategy toward China. The United States seeks to increase cooperation with China and its rapidly improving military, while simultaneously shaping Chinese choices and preparing for the possibility of a negative relationship. The impetus for this approach comes from the marked growth in China's comprehensive national power and limited clarity about China's future military capabilities and strategic intent. Given this lack of transparency, a robust surveillance and monitoring program focused on understanding the capabilities and, to the degree possible, the intent of a potential military rival is a reasonable response. Surveillance and survey operations improve clarity, reduce uncertainty and ambiguity, and thus work toward reducing risk in a relationship. For the U.S. military, this logic is an engrained part of organizational culture reinforced by decades of similar operations against the Soviet military during the Cold War, although surveillance operations are by no means associated only with adversarial relationships. Such surveillance operations, from the U.S. perspective, are both appropriate and legitimate. This perspective is based on customary international law and the standard interpretation of international legal regimes such as UNCLOS, which the United States believes unequivocally guarantees freedom of navigation for military units in EEZs, as well as the freedom to conduct military surveys.

The Chinese perspective on surveillance operations in its EEZ is influenced by China's geostrategic focus, view of potential threats, and mindset shaped by years of foreign intervention. For much of the period since the People's Republic was established in 1949, Chinese leaders had a continental focus. Potential threats from the Soviet Union and India dominated Chinese strategic thought and military planning. The emergence of the Taiwan independence movement, economic development of China's southeast coast, and changes in the global geopolitical environment starting in the 1990s raised the priority of maritime interests and heightened Chinese concerns about defending its maritime and air approaches in the Western Pacific.¹⁶ These approaches, in and through China's EEZ, were now considered more critical to the nation's security.

Territorial integrity and sovereignty carry significant weight in the political psyche of Chinese leaders and the general population writ large. One legacy of China's so-called century of humiliation marked by foreign intervention in the 19th and early 20th centuries is an acute sensitivity to real or perceived threats to China's sovereignty. U.S. surveillance operations in China's EEZ are interpreted in this context as an encroachment on Chinese sovereignty and a threat to national security. The Chinese government has instituted a multifaceted response that includes harassment of select U.S. military assets, legal maneuverings, and a strategic communication campaign with domestic and international components. Furthermore, the Chinese believe their actions are legally justified and do not counter fundamental tenets of UNCLOS, arguing, as Peter Dutton from the China Maritime Studies Institute points out, that because of their perceived security concerns "the balance of coastal-state jurisdiction and international freedoms for military activities in the EEZ favors the coastal state's right to limit foreign military activities."¹⁷ The Chinese argue that U.S. surveillance operations in the Western Pacific are not consistent with a cooperative, mutually beneficial bilateral relationship and are a relic of an adversarial Cold War mentality that has no place in the present U.S.-China relationship.

The contrast in perspectives could not be starker. For the United States, surveillance and military survey operations are viewed as routine, nonthreatening, legal, and appropriate. For China, they are hostile, threatening, illegal, and inappropriate. China's harassment of U.S. naval vessels and aircraft conducting surveillance and survey operations is intended to reinforce these concerns and produce a change in U.S. behavior by raising the costs and risks of U.S. operations. Chinese actions are a classic example of what Thomas Schelling described as a "threat that leaves something to chance,"¹⁸ where one actor uses the possibility of an accident or incident as a means of shaping and deterring the other actor's unwanted behavior. By creating greater risk in U.S. surveillance and survey operations, China hopes to alter U.S. behavior. China views the United States as more concerned about the safety of its personnel (and thus more risk averse) and regards the risks of a collision or incident escalating into a major conflict as limited and acceptable. As one PLA officer stated in a dialogue with U.S. counterparts, "We care about the safety of our people, but we care about national security more."¹⁹ This logic explains Chinese willingness to disregard established rules and norms for maritime and air interactions and why appeals to mutual concerns about the safety of sailors and airmen have proved ineffective.

Factors Behind the U.S.-Soviet INCSEA Agreement

Despite the very different political context of U.S.-China relations, the example of how the United States and Soviet Union handled this issue may provide useful insight into management

of dangerous air and maritime interactions. Military incidents were manifest from the concluding days of World War II and remained a prominent feature of the Cold War until the implementation of INCSEA in 1972. Over this period, dangerous interactions between U.S. and Soviet forces had two distinct phases demarcated by changes in the power-projection capabilities and operational patterns of Soviet military forces.

The first phase (1945–1960) was dominated by interactions within the air domain.²⁰ Air incidents were a direct result of U.S. intelligence initiatives to monitor Soviet military developments during a period of increasing Cold War tensions. U.S. collection operations included both photo- and electronic-intelligence missions conducted along the periphery of the Soviet Union and, for a period of time, within Soviet airspace. Additional U.S.-Soviet incidents came about as a result of the Korean War.²¹ By one account, over 200 U.S. Airmen were lost as a result of such air incidents.²² Maritime interactions were less numerous during this phase due to the coastal nature of the Soviet navy and its limited overall capabilities, which were significantly inferior to those of the U.S. Navy. By the early 1960s the balance between air and maritime incidents began to shift toward a greater number of dangerous maritime encounters. This dynamic was driven by enhanced Soviet navy capabilities including more out-of-area deployments, the introduction of intelligence-collection ships into the Soviet inventory starting in the 1950s, and increased Soviet maritime commercial activity (including a large Soviet fishing fleet operating near the United States and increased Soviet merchant activity to and from Cuba).²³ The eventual elimination of direct overflights of Soviet territory by U.S. aircraft and the growing relevance, and use, of space-based reconnaissance assets contributed to the decreased severity of air incidents.

The general pattern of increasingly dangerous maritime interactions continued throughout the 1960s, tracking the growing reach and capabilities of the Soviet navy. Increasing concern over the severity and escalatory potential of these incidents eventually led the United States to propose talks with the Soviets to address the problem and seek resolution. Initial mediation efforts were rebuffed, but U.S. statements of concern were one of a number of factors that led to a marked downturn in the number of maritime incidents starting in late 1968 and lasting throughout 1969.²⁴ This positive development proved short lived as the pace of dangerous and provocative interactions increased again in 1970. Starting with the Soviet navy's Okean 70 exercise (a large-scale exercise involving over 200 Soviet vessels participating in simulated warfighting scenarios in multiple locations), harassment incidents, aggressive maneuvering, and intelligence-collection operations by both countries were once again on the rise.²⁵ Rather unexpectedly, from the U.S. perspective, in late 1970 the Soviets finally relented to American desires to discuss these incidents at sea.²⁶

Three issues motivated both sides to seek agreement. These included heightened concern over the escalation potential of future incidents, a growing parallelism in the nature and scope of each side's surveillance operations, and a burgeoning period of détente between the United States and Soviet Union. While there is insufficient information to determine the precise weighting of these factors in driving the two sides toward mutual restraint, available evidence suggests that escalation control was likely the most important.²⁷ Mutual restraint was especially important given the zero-sum and global nature of U.S.-Soviet geopolitical competition (occurring against a backdrop of rapidly expanding nuclear arsenals), which produced a tightly coupled system where an incident in one area could escalate into a broader confrontation or provoke a response in a different geographic or functional area. By the early 1970s, both the United States and Soviet Union had developed a shared appreciation of the potential negative consequences of military incidents, including the risk of escalation to the nuclear level. These parallel interests developed despite the ideological struggle between the United States and the Soviet Union and associated intense military competition.

A number of factors contributed to a common understanding of the escalation potential. First was the shift from air incidents to maritime incidents. Despite the seriousness of the air incidents in the 1940s and 1950s, the escalation potential was minimal. Air incidents typically involved a small number of aircraft operating in known geographic locations. Moreover, pilots on both sides were under direct and constant command of ground controllers. These conditions allowed time for rational decisionmaking, which reduced the escalation potential of air incidents. However, as both sides came to realize in the late 1960s and early 1970s, these conditions did not necessarily apply in the more crowded maritime domain. The Soviet Okean 70 exercise demonstrated the potential for large concentrations of U.S. and Soviet maritime forces to operate in close proximity to each other. Individual incidents, which were growing in frequency and severity throughout the runup to INCSEA, might not remain isolated, but could spill over and draw in other nearby military forces. Tactical and operational dynamics in the maritime domain could produce rapid escalation that decisionmakers on both sides might not have been able to control. Moreover, the expanded global presence of the Soviet navy meant that such incidents might occur anywhere in the world. Increasingly, the United States and Soviet Union recognized that they shared an interest in preventing incidents rather than merely seeking to limit their impact. The rise of concerns about maritime incidents was exacerbated by the expanding combat power of the Soviet navy, which both increased the potential escalation consequences and may have emboldened the Soviet navy during encounters with the U.S. Navy.²⁸

A second issue heightening concerns about escalation was Soviet trepidation over the ability of inexperienced ship commanders to operate in close proximity to U.S. Navy units when deployed far from home. During INCSEA negotiations, a Soviet interpreter stated privately that “Soviet naval leaders worried that some of these young officers did not possess the maturity or the ship-handling skills required for command, and this could lead to undesirable consequences.”²⁹ The interpreter went on to state that “this underlying concern explained the Soviet decision to accept the long-standing American offer to implement some controls.” These three issues heightened Soviet concerns that a maritime incident could escalate into an unwanted broader confrontation or conflict.

At the same time, growing similarity in the surveillance operations conducted by both countries and the period of détente in the early 1970s demonstrated that mutual military restraint could produce tangible benefits.

The United States possessed a decided advantage in the ability to conduct air and maritime intelligence-collection missions in the early phases of the Cold War. It had access to an extensive network of European and Asian bases, while Soviet basing options were constrained. The coastal nature of the Soviet navy precluded it from conducting extended, out-of-area intelligence missions against the United States and its military forces. This dynamic began to change in the late 1950s and early 1960s due primarily to increasing Soviet inventories of intelligence-collection ships and Tu-95 BEAR aircraft. Soviet intelligence-collection missions off both coasts of the United States, within North American Air Defense Identification Zones, and against U.S. maritime forces deployed around the world became commonplace in the runup to INCSEA, and in many ways mirrored U.S. intelligence-collection missions. These collection missions presumably provided valuable intelligence on U.S. military capabilities and intentions. However, the Soviet forces conducting these missions were just as vulnerable to U.S. harassment as U.S. surveillance units operating in and around the Soviet Union and against Soviet forces in distant areas. Increased parity in the scope and nature of each side’s intelligence-collection missions and the mutual vulnerability of collection assets produced a common interest in behavioral norms that reduced operational risk while allowing both sides to continue valuable collection activities.

The final major causal factor favoring agreement between the United States and Soviet Union was the modest improvement developing in the broader political relationship between the countries. The time period of INCSEA negotiations saw the signing the Nuclear Non-Proliferation Treaty and agreement between the United States and Soviet Union to begin bilateral

discussions on nuclear arms limitations. An agreement covering incidents at sea followed on these breakthroughs and contributed to this positive political momentum.

David Winkler highlights two lesser but not insignificant issues that may have contributed to Soviet interest in INCSEA. First was the vulnerability of the expanding Soviet commercial fleet. Despite the vast increase in the quantity and quality of the Soviet navy in the 1960s, it still lacked the ability to deter U.S. Navy monitoring, tracking, and potential interdicting of Soviet commercial vessels around the world. Codifying norms of behavior in international waters and airspace would afford the Soviets some degree of protection from potential harassment by U.S. forces. The Soviet navy may also have derived domestic benefit from INCSEA in the form of service prestige and political influence as a result of its formal relationship with the U.S. Navy. As the only branch of the Soviet military to have such contact with a U.S. counterpart, it could lay claim to being an approximate equal to the U.S. Navy, bolstering its position vis-à-vis the other branches of the Soviet military in the competition for resources.³⁰

Comparison of U.S.-Soviet and U.S.-China Military Encounters

The Cold War-era U.S.-Soviet and contemporary U.S.-China relationships are very different, most notably in the absence of a global zero-sum competition between the United States and China and a much lower risk of a military incident escalating into a broader conflict. On the other hand, the potential economic and political consequences of U.S.-China incidents are more pronounced than in the Cold War case. Both sides have more to lose if military incidents disrupt broader relations. Nevertheless, there is value in examining similarities and differences between the two cases with an eye to how they affect incentives and behavior. We focus on six factors:

- perceived risk of escalation
- degree of parallelism in surveillance operations
- political context of military competition
- relative capabilities of the respective militaries
- interservice rivalry and civil-military relations
- importance of commercial shipping.

Perceived Risk of Escalation

Judged objectively in the context of the broad U.S.-China relationship, the dangerous military encounters considered herein have a much lower risk of escalating into a broader conflict (much less a nuclear conflict) than U.S.-Soviet incidents during the Cold War. U.S.-China air and maritime incidents have been much less severe, whether measured in terms of loss of life, loss of aircraft, or damage to ships. There is not a clear trend toward increasing severity of incidents. (Open-source information does not permit a judgment about trends in the frequency of incidents or close calls.) Maritime incidents involving China have a somewhat different character in that there are fewer navy-navy incidents and more interactions involving Chinese paramilitary assets challenging U.S. maritime forces. The relatively limited losses make the risks in the current situation more tolerable to China.

Geographic differences also reduce escalation risk. U.S.-China dangerous military interactions are currently geographically limited—occurring mainly in China's EEZ or nearby waters (for example, the Yellow Sea). Conversely, interactions between U.S. and Chinese navies in distant waters, such as counterpiracy operations in the Gulf of Aden, have been cooperative and professional. This pattern contrasts with Cold War incidents, which were initially limited to areas around the Soviet Union but which became global as the Soviet navy's exercises and operational deployments expanded, and were equally contentious in all areas. The underlying Cold War political competition, clash of ideologies, and struggle for dominance between two opposed political systems had no geographic bounds. It is unclear whether top Chinese civilian and military leaders share Soviet concerns about the increased escalation risks caused by inexperienced commanders and crews operating in distant waters. The cautious, step-by-step approach the PLAN has taken to extra-regional deployments may reflect concerns about the quality of naval commanders, but thus far the pace and scope of deployments has been limited enough to allow handpicking the captains and crews.³¹ If PLAN extra-regional deployments step up significantly, there may be more concerns about proficiency and the potential for less control (and thus greater escalation risk) over naval assets deployed far from China's coasts. But at present, these deployments are in cooperative settings where the risk of dangerous incidents with the U.S. military is minimal.

Common concerns about the risks of escalation (and the importance of reducing that risk) do not presently exist in the U.S.-China situation to the degree necessary to induce mutual restraint. Not only are the number and severity of current incidents much less than in the Cold War, but also U.S. concern about the potential for escalation is much more pronounced than it

is for the Chinese. In addition to traditional concerns about military escalation, both the United States and China have more to lose if a military incident turns into a major bilateral political issue that impedes U.S.-China economic and international cooperation. However, the Chinese also appear to judge that this risk is acceptably small. (Given that decisionmaking in China is complex and involves a multitude of actors and organizations, with their own motivations and interests, it is far from certain that there is a unified Chinese view of escalation potential and the risk to the broader bilateral relationship.)

Parallelism in Surveillance Operations

During the period of the most intense maritime interactions in the Cold War, U.S. and Soviet militaries conducted roughly parallel naval and air surveillance operations against each other. Each side operated under the premise that these operations were a valuable, legitimate, and normal means of doing business. Although China employs air and naval surveillance assets, it has a limited ability to duplicate U.S. maritime and air surveillance operations and lacks the ability to monitor U.S. maritime activities on a global basis. This mismatch in operational capabilities means that the United States benefits more from the lack of restrictions on such activities and that China sees limited value in accepting U.S. surveillance activities in its EEZ because it is unable to undertake parallel operations that might yield equal dividends. This mismatch hinders the ability of both sides to reach consensus on the legitimacy and appropriateness of the operations.

Political Context of Military Competition

This category consists of three elements: the nature of the military-to-military relationship, influence of nationalism on security decisionmaking, and ability of the respective militaries to address operational issues separate from broader political considerations. In terms of the military-to-military relationship, the U.S.-China case has more cooperative elements than the U.S.-Soviet relationship. There is no Cold War parallel to cooperative U.S. Navy-PLAN endeavors such as counterpiracy operations in the Gulf of Aden, joint exercises, port visits, and personnel exchanges. This cooperation is a potential foundation upon which to pursue agreement over military encounters on the high seas and in international airspace. Although both the United States and China seek to maintain a stable relationship, most observers see the competitive elements of the relationship increasing faster than the cooperative side. The opposite was true in the U.S.-Soviet relationship before INCSEA, where détente encouraged a new emphasis on cooperating in pursuit of common interests (such as nonproliferation) and finding ways of managing competition.

Nationalism, and its potential impact on decisionmakers, also differs greatly between the two cases. In the U.S.-China situation, perceived U.S. encroachments on Chinese sovereignty have produced nationalistic calls for tougher responses from the Chinese public and the Chinese military. This provides the PLA and Chinese decisionmakers incentives to take tough rhetorical positions on the issue and makes compromise more difficult. The Cold War produced a different dynamic, with Soviet leadership more concerned about negative international perceptions of their harassment of U.S. military forces and the potential for inducing anti-Soviet sentiments in other countries.³² In that case, the potential influence of nationalism upon domestic populations favored compromise.

Regarding the ability to separate military and political issues, China has been unwilling to decouple the specific military issue of EEZ operations from overarching political issues. Unlike the Soviets, China remains steadfast in linking specific military issues to the broader political context; this has made it impossible for the MMCA to agree on operational procedures that work around underlying political disputes. This may partly be a function of the importance of sovereignty in the Chinese context; the issue is not more or less effective counterintelligence, but is tied up with the Chinese conception of the importance of sovereignty and the PLA's special role in defending that sovereignty. Chinese strategic culture is deeply rooted in using a top-down approach to security issues. Chinese officials repeatedly emphasize that a mutually beneficial political environment is a precondition for dealing with contentious military issues.³³ The United States, colored by its experience during the Cold War, believes that a bottom-up approach focused on common interests remains viable and that solutions to difficult military problems can be achieved despite broader, irresolvable political disputes.

Relative Military Capabilities

China is reducing the U.S. military advantage via its naval modernization efforts and development of shore-based antiaccess/area-denial capabilities, but this effect is geographically limited to waters near China. The PLAN's shift from a purely coastal navy to one with more potent regional capabilities mirrors the increased Soviet emphasis on maritime capabilities starting in the 1950s.³⁴ The current situation roughly resembles the Cold War circa the early 1960s, with a somewhat more active Chinese regional naval presence. Improving PLAN capabilities have not created the relative balance that existed between the U.S. and Soviet navies in the immediate runup to INCSEA.

Interservice Rivalry and Civil-Military Relations

The INCSEA agreement raised the Soviet navy's status and clout in interservice politics and was compatible with the civilian emphasis on détente. However, it is not clear that the

PLAN would derive similar benefits from an agreement. The opposite is likely true: the navy's front-line role in defending Chinese sovereignty is a source of clout in interservice debates, generates public support, and justifies increased resources for naval modernization.

Importance of Commercial Shipping

China is much more dependent on ocean-borne commerce than the Soviet Union ever was. China's overall trade dependence has almost doubled in the last decade (from 40 percent in 2000 to 73.4 percent during the 2006–2008 period), giving it the second largest ratio of international trade to gross domestic product in the world.³⁵ Some 80 to 90 percent of this trade is carried by ship.³⁶ Chinese writers acknowledge the potential vulnerability of Chinese merchant shipping (and China-bound third-party shipping) to piracy, terrorist action against chokepoints, or interdiction. Chinese national security writings acknowledge that PLAN capabilities are insufficient to protect Chinese sea lines of communication and cite this as a strategic vulnerability. However, the United States does not monitor and track Chinese commercial vessels as it did Soviet vessels, and the U.S. policy emphasis on freedom of navigation means the U.S. Navy does not harass or threaten Chinese merchant ships.

How the Soviet and China Cases Differ

The three most important factors that contributed to Soviet interest in an INCSEA agreement (concerns about escalation risk, broadly parallel air and maritime intelligence and surveillance operations, and warming political relations) do not presently exist in the U.S.-China situation to the degree necessary to induce mutual restraint in maritime and air interactions within China's EEZ and nearby waters. The interservice and civil-military benefits the Soviet navy derived from negotiating an INCSEA agreement with its U.S. counterpart are absent (or reversed) in the China case. The narrow geographic focus of U.S. operational disputes with China and the limited scope of Chinese out-of-area and surveillance operations also pose challenges for creating parallel interests that support operational restraint. Some of these factors are likely to change over the next 10 to 15 years as Chinese global economic interests and naval modernization efforts produce a larger, more capable PLAN that is more active inside and outside the region. However, waiting for Chinese interests and attitudes to change is not an attractive solution given continuing operational risks for U.S. air and naval surveillance assets and the potential for a military incident to badly damage bilateral relations.

There are also some positive factors that were absent in the U.S.-Soviet Cold War case. First, the U.S.-China relationship has many more positive and cooperative elements, including deep

economic interdependence, a degree of strategic cooperation on global and regional security issues, and extensive social, educational, cultural, and societal ties. Both countries have a lot to lose if military competition intensifies and damages this cooperation. Second, the United States and China are not engaged in a global, zero-sum ideological competition; bilateral disputes are narrower and more functionally or geographically focused. The limited geographic scope of disputes may provide opportunities for creative approaches. Third, China is more integrated into the global economy and more dependent on maritime trade than the Soviet Union ever was; this produces common interests in freedom of navigation, protecting maritime commerce, and keeping sea lines of communications open (even if the two countries disagree about some aspects). Fourth, China is more concerned about projecting a positive and cooperative international image.

The Chinese Calculus on EEZ Issues

This analysis suggests that U.S. policymakers cannot apply lessons from negotiating the INCSEA agreement with the Soviet Union to current disputes with China over air and maritime operations in a mechanical way. If the problem is selective Chinese noncompliance with international rules and norms in order to advance its national security interests, U.S. policymakers need to understand the underlying Chinese policy calculus, how it may change over time, and potential means of influencing that calculus to produce different behavior. Otherwise, disparities in risk calculations and the lack of parallel interests are likely to embolden the PLA and other Chinese paramilitary forces to continue their aggressive behavior within China's EEZ.

While Cold War factors may be of limited use in the present U.S.-China situation, it may still be possible to structure parallel interests in ways that support mutual restraint. The approach for the United States and China may not be as straightforward as it was for the United States and Soviet Union, where escalation risk, mutual benefits, and operational safety calculations drove a convergence of interests. The present situation has unique challenges and opportunities that not only add to the complexity but also may expand the range of positive and negative inducements available to U.S. policymakers. Moreover, although the United States and China are the main players, other Western Pacific countries (most notably Japan) are also engaged in disputes about military and survey operations in contentious areas. These factors make a potential solution set more nuanced than it was in the Cold War.

The primary hurdle is China's perceived sovereignty and national security concerns stemming from the U.S. operations in China's EEZ. Assuming the United States will continue these operations, the success of any initiative will depend upon reducing or offsetting these concerns. U.S. efforts to establish a comprehensive set of air and maritime behavioral norms with China

Table 1. Variables in China's Calculus on EEZ Activities

Variable	Impact on Chinese Sovereignty/Security Concerns	Relative Weight
Sovereignty/Security concerns	Same	High
Intelligence/Counter-intelligence	Reinforces	Medium
Geostrategic political considerations		
U.S. role in Asia	Reinforces	Medium
Stable external environment	Moderates	High, but EEZ operations have limited impact
Shape rules and norms	Reinforces	Low
Positive Chinese image	Moderates	Medium, but EEZ operations have limited impact
Chinese domestic context	Mixed	High
Global commons access	Moderates	High, but EEZ operations have limited impact
Escalation control	Moderates	High, but EEZ operations have limited impact
U.S.-China relations	Moderates	High, but EEZ operations have limited impact

have been unsuccessful because they have not focused on this goal. Achieving any degree of success requires approaches that either reduce Chinese sovereignty and security concerns or offset these concerns by raising the weight of other strategic factors in the overall Chinese decisionmaking calculus on EEZ military operations.

This requires some understanding of the factors included in the Chinese decisionmaking calculus. Based on Chinese policy objectives, official statements, patterns of behavior, and logical inferences based upon specific military surveillance operations, seven decisionmaking variables are postulated in table 1: sovereignty/security, intelligence/counter-intelligence, geostrategic political considerations, Chinese domestic context, global commons access, escalation control, and impact on U.S.-China relations.

As this list of variables suggests, thinking about Chinese policy on maritime interactions as derived directly from a fixed set of Chinese national interests would be misleading. How a policy

issue is framed and the venue for policy debate and decision influences which actors have seats at the table and which interests are given the most weight in Chinese policy. To date, the issue of U.S.-China maritime interactions has been framed narrowly in terms of protecting Chinese sovereignty and security, giving military and paramilitary actors a privileged position in the debate. However, other Chinese actors have different interpretations of which interests are most important, and the relative importance of the variables is likely to change over time as China's regional and global economic and security interests evolve. The following analyzes each variable.

Sovereignty/Security Concerns. These reflect China's historical concerns about protecting national sovereignty and the increased economic importance of defending China's coastal provinces.

Intelligence/Counter-intelligence. Formal international rules and informal norms of behavior affect China's ability to gather needed strategic and tactical intelligence and to limit the ability of potential adversaries to collect intelligence. The ideal circumstance for China is permissive rules for Chinese operations and restrictive rules for others' operations in China's EEZ or other sensitive areas. PLA officers have expressed particular concern about U.S. efforts to use air and naval surveillance to collect "battlefield intelligence" on PLA capabilities and the operational environment in the Western Pacific. Given the gap in U.S. and Chinese military capabilities, the PLA has strong incentives to deny the United States technical intelligence on systems such as submarines, air defenses, and advanced electronic warfare systems that could complicate U.S. military planning and actions. At the same time, China needs to collect information on the military capabilities of potential adversaries and on the operational environment, including in disputed waters and in the EEZs of other countries. This need will likely grow over time as PLAN operational activity increases and expands in geographic scope.

Geostrategic Considerations. China has at least four concerns. The first involves China's attitude toward the U.S. strategic role in Asia. Despite Chinese assurances that it accepts the United States as an "Asia-Pacific nation,"³⁷ some Western analysts believe that China may pursue a long-term objective of eroding U.S. influence in Asia.³⁸ Successful Chinese efforts to constrain the U.S. military's ability to operate in an antiaccess/area-denial environment could reduce U.S. regional influence and loosen bonds between the United States and its regional allies and partners. This would enhance China's ability to achieve its regional objectives, including favorable settlement of territorial disputes in the South and East China seas.

A second consideration involves China's need for a stable external environment that allows a continued focus on domestic economic and social development. China values cooperative external relationships and a positive public image to help ensure external issues do not disrupt internal progress. Aggressive efforts to challenge U.S. military operations in the Western Pacific

risk unsettling the regional security environment and impacting China's ability to focus on internal development.

A third consideration involves China's broad willingness to accept international rules and norms that they believe reflect the interests of powerful Western states. China has benefited immeasurably from most of the rules and norms in the current international system, but some Chinese leaders and scholars want to modify some existing rules and norms to better serve the interests of developing countries. Efforts to articulate and enforce China's position on what military operations are appropriate and legal within EEZs are consistent with this perspective.

A fourth consideration involves China's efforts to project a positive international image as a responsible power that is making positive contributions to regional and global security. Actions that damage this image or which portray China as a disruptive power that will challenge or threaten international stability are viewed negatively.

Chinese Domestic Context. An aggressive posture by the PLAN and Chinese maritime paramilitary forces against U.S. operations in China's EEZ plays well with nationalistic elements of the Chinese decisionmaking hierarchy. This can bolster the relative importance of the PLAN in comparison to the other branches of the PLA, affording it greater opportunity in the competition for resources. On the other hand, the PLAN seeks to show that it can protect China's overseas interests and safeguard Chinese economic development as part of the "new historic missions." Some of these missions require cooperation with foreign militaries, including the U.S. Navy.

Global Commons Access. Assured access to the global economy for resources and to reach markets is an absolute necessity for continued Chinese economic growth and development. Chinese attempts to decouple U.S. military access to select portions of the Western Pacific air and maritime domains from the broader global commons set a precedent that may be applied to restrict future Chinese access to the global commons. This may not be of great concern to the PLAN today, but it may become much more important in the future.

Escalation Control. China shares an interest in preventing dangerous air and maritime encounters with U.S. military assets from escalating into a broader conflict, but Chinese leaders and officers tend to regard the risk of such escalation as limited and manageable.³⁹ So long as Chinese decisionmakers view escalation risks as limited, this factor will have limited weight in the Chinese decisionmaking calculus.

Relations with the United States. A constructive relationship with the United States is important for China's continued economic development and ability to achieve its national objectives. However, despite what the 2001 EP-3 incident did to bilateral relations, Chinese civilian

and military leaders tend to regard the risk of a military incident generating major damage to bilateral relations as minimal.

Changing the Chinese Calculus

The importance of sovereignty and other variables detailed in the decisionmaking model highlights a number of potential avenues of approach in altering the Chinese policy calculus and thereby influencing Chinese behavior. Our analysis begins with a narrow focus on approaches to intelligence and counter-intelligence issues, which mainly involve elements of the PLAN, China's paramilitary forces, and Chinese intelligence community. We next consider broader naval and maritime approaches that involve other elements of the PLAN, the Chinese foreign policymaking apparatus, and Chinese shipping interests. We then consider strategic approaches that attempt to connect the EEZ disputes to high-level issues of concern to Chinese national policymakers. In addition to moving from low-level functional issues to high-level strategic issues, this organizational approach also recognizes that one potential means of altering a Chinese decision is by changing which Chinese actors are involved in deciding the issue.

Intelligence/Counter-intelligence Approaches. These approaches attempt to alter the Chinese calculus by linking China's own ability to gather intelligence with its tolerance of intelligence-collection activities by other countries.

One approach would be to create direct parallels between U.S. operations in China's EEZ and Chinese operations in Japan's EEZ. Although China does not currently conduct intelligence-collection flights and patrols against Hawaii or the continental United States, it does employ a range of intelligence collection and survey ships and aircraft in the Western Pacific.⁴⁰ Chinese ships have conducted hydrographic surveys within Japan's EEZ, presumably to support submarine and antisubmarine operations. This has parallels to the U.S.-China situation in that a broader political issue, in this case a disputed portion of Japan's EEZ, produces risky behavior within the maritime domain.⁴¹ These Chinese activities have been an irritant in the Japan-China relationship. The United States could draw direct parallels between U.S. operations in China's EEZ and Chinese operations in Japan's EEZ to highlight the similarity and parallel U.S. and Chinese interests in allowing these operations to continue without undue operational risk. This could also involve Japan calibrating its responses to Chinese activities within its EEZ to how China treats U.S. operations in its EEZ. Japanese policymakers may be reluctant to acquiesce to Chinese operations within their EEZs, but neither the United States nor Japan benefits from a situation where China can enforce restrictions on operations in its EEZ while enjoying unrestricted access to the EEZs of other countries. This approach should

be conducted trilaterally to gain Japanese support and to allow the United States to leverage any successes in subsequent bilateral dealings with China. China may be reluctant to engage trilaterally, although in the past the Chinese government has proposed China-U.S.-Japan policy planning talks and Chinese analysts and military officers have periodically called for trilateral discussions of security issues.⁴²

A second approach would be for the United States to create parallel interests in mutual restraint by linking Chinese tolerance of U.S. surveillance operations in its EEZ with U.S. tolerance of select Chinese intelligence-collection activities using other means or in other areas. Although China does not conduct the same type of surveillance and survey operations in U.S. waters and airspace, the PLA uses other methods to collect intelligence on the United States and U.S. military forces. For example, the United States could link China's reported use of intelligence-collection facilities in Cuba that target the United States with U.S. surveillance operations in the Western Pacific.⁴³ Drawing parallels between the two types of operations could undercut Chinese arguments about the "hostile nature" of U.S. activities and help achieve common understanding on the appropriateness of such operations. If technically feasible, the United States could strengthen this linkage by jamming Chinese technical collection systems in response to specific harassment incidents within China's EEZ.

A third approach would address Chinese concerns by linking the frequency of U.S. surveillance operations within China's EEZ to Chinese concessions or continuing cooperation in other areas. As an illustration, the United States seeks "sustained and reliable" military-military ties with China, but China periodically suspends these contacts in response to U.S. actions such as arms sales to Taiwan. The United States could reduce the frequency of surveillance operations when China participates in substantive military-military dialogue, and increase the frequency of operations if China suspends dialogue (citing the need to compensate for the lack of direct contacts). This would give China an incentive to continue an activity the United States wants. This approach carries a degree of risk stemming from a decrease in collection opportunities; U.S. policymakers would have to calculate the relative gains and losses of such a linkage. A linkage between surveillance operations and military-military contacts is probably *not* the right area to target, but illustrates the basic logic of this approach.

Maritime Cooperation/Coercion. These approaches would attempt to play on the distinction between contentious U.S.-Chinese interactions within China's EEZs and more cooperative interactions in distant waters. (This pattern differs from the U.S.-Soviet experience, and thus offers different opportunities.) It would employ measures that decrease the relative weight of sovereignty concerns by policy options executed in noncontentious geographic areas.

The first approach would highlight the value of mutually agreed operational norms and patterns of cooperation between U.S. and Chinese forces and demonstrate the routine and nonthreatening nature of surveillance operations in international waters and airspace. The logical starting point would be in the counterpiracy operations conducted in the Gulf of Aden. Development of enhanced interoperability between U.S. and Chinese air and maritime forces would improve nascent professional bonds between the two navies. These efforts could focus on the surveillance, as opposed to interdiction, portion of the counterpiracy mission. This could help to desensitize the Chinese toward air and maritime surveillance in general while demonstrating that the PLA also conducts such surveillance as a routine part of its operations. Other feasible areas for cooperation include air and maritime surveillance in support of counterterrorism and countersmuggling operations, humanitarian affairs and disaster-relief, and noncombatant emergency evacuations. Such initiatives need not be restricted to the navy-to-navy realm. The U.S. Coast Guard has a well-established track record of cooperation with Chinese counterparts. Exploiting this record affords the United States an opportunity to highlight the benefits of cooperative endeavors with Chinese paramilitary organizations (who are involved in many risky interactions). These patterns of operation could be incrementally applied to geographic areas closer to China's EEZ as sovereignty sensitivities are reduced and benefits to cooperation are realized. This approach is also likely to garner the support of other Western countries, which may be willing to take the lead in some areas. (This approach would play on Chinese interests in improving PLA surveillance capabilities, contributing to a stable external environment, creating a positive Chinese image, demonstrating PLAN contributions to protecting Chinese overseas interests, enhancing Chinese access to the global commons, and maintaining stable U.S.-China relations.)

A second approach could involve more coercive measures that target Chinese navy ships or commercial shipping outside China's EEZs. Instead of cooperating in distant waters in hopes of establishing norms that might eventually affect Chinese behavior inside its EEZs, the United States could respond to EEZ incidents in a "tit for tat" manner by harassing Chinese navy ships or Chinese-flagged commercial shipping elsewhere. Such behavior would highlight the potential for geographic escalation and for Chinese behavior within its EEZ to affect Chinese maritime and commercial interests elsewhere. (This approach would play on Chinese interests in contributing to a stable external environment, creating a positive Chinese image, enhancing Chinese access to the global commons, and maintaining stable U.S.-China relations.) Although it violates the norms of open access the United States seeks to reinforce, it highlights Chinese weaknesses (a larger Chinese-flagged merchant fleet operated by state-owned enterprises directed by senior Chinese Communist Party cadres; limited PLAN ability to protect merchant shipping) and targets China's greater dependence on maritime shipping.

Geostrategic and Bilateral Considerations. These approaches would play on Chinese geo-strategic interests and concerns about maintaining a stable regional environment and relationship with the United States conducive to economic and social development.

One approach in the public relations sphere would be for the United States to execute a more structured, consistent, and sustained strategic communication plan that highlights the international norms of airmanship and seamanship contained in CUES and ICAO rules. U.S. strategic communication efforts to date have been reactive and sporadic, with a flurry of pronouncements on Chinese violations of these norms immediately after an incident that quickly dissipates. A more systemic plan that regularly highlights and reports on China's limited compliance with international norms could add international pressure on China by damaging the PLA's image as a responsible, professional military and China's image as a "peaceful rising power" that does not challenge international norms. China has sometimes shown sensitivity to its international image, especially when it is shown to be violating well-established international norms.

A second approach would involve drawing parallels between the rights of military units to conduct operations in EEZs under the freedom of navigation principle and the more general issue of access to the global commons. By broadening the issue beyond military channels, the approach would expand the Chinese actors affected and might produce more inputs to senior Chinese decisionmakers in support of restraint. Changing the mix of relevant actors could balance hard-line PLA opinions on these issues. U.S. policymakers are already pursuing this approach by rhetorically linking military activities within EEZs with broader issues of freedom of navigation and commercial access within the global commons. Another means of pursuing this linkage would be to associate Chinese use of legal arguments that narrowly define military freedom of navigation rights in EEZs with legal arguments that might limit Chinese commercial access to, or use of, the global commons. Such arguments could highlight China's efforts to establish "dual standards" that let it engage in the same kind of behavior elsewhere that it condemns inside its EEZ. The United States could also cite Chinese harassment of U.S. military aircraft and ships as a threat to freedom of navigation and access to the global commons that justifies an increased U.S. naval presence in the South China Sea to defend international rules and norms.

A third approach would target the assumption that military incidents inside China's EEZ are unlikely to escalate into broader conflict or seriously threaten bilateral relations. China's willingness to violate international norms and conduct harassment activities is based in part on the assumption that these activities are not likely to escalate into larger military incidents or spill over into other parts of the U.S.-China relationship. The United States could challenge this assumption by reacting more strongly and visibly to an incident than the PLA expects. The United States could

Table 2. U.S. Policy Options and Chinese Calculus Affected

Policy Option	Parts of Chinese Calculus Affected
Parallel U.S. EEZ operations in China; Chinese EEZ operations in Japan	• Intelligence/Counter-intelligence
Link U.S. surveillance operations with Chinese intelligence collection activities	• Intelligence/Counter-intelligence
Link frequency of U.S. EEZ operations to Chinese concessions/cooperation	• Intelligence/Counter-intelligence
Increase maritime cooperation outside China's EEZ	Chinese interests in improving PLA surveillance capabilities, contributing to a stable external environment, creating a positive Chinese image, demonstrating PLAN contributions to protecting Chinese overseas interests, enhancing Chinese access to the global commons, and maintaining stable U.S.-China relations
"Tit for tat" coercive responses against Chinese navy ships or commercial shipping	Chinese interests in contributing to a stable external environment, creating a positive Chinese image, enhancing Chinese access to the global commons, and maintaining stable U.S.-China relations
Strategic communications efforts to publicize Chinese violations of international norms	PLA's image as a responsible, professional military and China's image as a "peaceful rising power" that does not challenge international norms
Link EEZ operations with Chinese access to global commons	Chinese access to the global commons
Overreact to incidents in ways that challenge Chinese belief that escalation risks and potential damage to bilateral relations are limited	Escalation control; Chinese need to maintain stable relationship with United States

also respond asymmetrically, using other components of national power to extract a price from China for interference with U.S. military operations in the Chinese EEZ. The Chinese view that the United States is more risk averse and that the risk of military escalation is limited helps fuel assertive Chinese behavior. By reversing this dynamic through actual or threatened escalation, the United States may be able to moderate Chinese military behavior (see table 2).

The various approaches described above are not necessarily all mutually exclusive, although U.S. policymakers would want to think carefully about the mix of cooperative and

coercive approaches at any given time. Given the sensitivity of the sovereignty issue, no single option is likely to be sufficient. A mixed approach, particularly one that influences a large number of Chinese decisionmakers, may maximize the probability of success. A composite approach must identify key Chinese audiences and their potential reactions to the various options and use this knowledge to determine the right mix of options.

One factor that emerges from this review of U.S. policy approaches is that the United States seeks to gain Chinese acceptance of relatively permissive international norms that allow a range of military activities inside EEZs, but is concerned about the risk of aggressive Chinese military intercepts intended to reinforce China's more limited interpretation. Some of the options described above may require the United States to generate tactical/negotiating leverage by restricting China's ability to enjoy full rights to freedom of navigation or intelligence collection in international waters if it denies similar access to others. This risks creating new, more restrictive international norms, which is not the outcome the United States wants. If Japan harassed Chinese survey ships operating in its EEZ, this might reinforce an international norm that such activities are not permissible rather than persuade China to tolerate similar U.S. operations on the basis of parallel interests. This is a risk, but given the Chinese transactional approach to negotiations, it may be a necessary one. Similarly, some of the options discussed above require more assertive U.S. actions (including the threat to escalate minor incidents) that are not consistent with the long-term U.S. desire for a peaceful and cooperative relationship with China. However, such actions may be necessary to broaden the Chinese actors involved in the issue, alter the Chinese policy calculus, and produce agreement on restraint.

Conclusion

The continuing pattern of dangerous U.S.-China air and maritime incidents in China's EEZ is not the product of a lack of clear international rules and norms. Rather, it is the result of China's interpretation of what military activities are allowed inside its EEZ and its willingness to violate established rules and norms to deter U.S. surveillance activities. If the United States hopes to change China's behavior, it will need to understand China's underlying calculus and adopt policies that can affect the variables in that calculus and produce different Chinese behavior. This paper has outlined key variables in the Chinese policy calculus and identified avenues of approach the United States might use to alter that calculus.

It is not self-evident that this is a major problem. This paper does not address the intelligence value of U.S. operations in China's EEZ, but one finding from the comparison with the U.S.-Soviet experience in the Cold War is that both the United States and Soviet

Union suffered much greater losses in terms of personnel, ships, and planes. Current U.S. operations are not producing unacceptable operational risks or excessive damage to bilateral relations. On the other hand, it is not clear that this tolerable status quo will continue indefinitely. China has the ability to significantly increase the level of harassment of U.S. assets, and a “threat that leaves something to chance” may produce a collision or accident that causes significant loss of life, with unpredictable consequences for the relationship. Moreover, in the future China may define what military activities are “unacceptable” more broadly. One PLA officer argued in a recent dialogue that “China sees the maritime area as part of its defensive perimeter” and “will try to stop U.S. military operations that it views as a threat to its national security.”

Our analysis does not identify any silver bullet solutions likely to produce an immediate change in PLAN behavior. The more cooperative approaches require time for the benefits of cooperation to accrue and for normative arguments to be heard and heeded, both in China and internationally. (If China follows the Soviet pattern—which is by no means guaranteed—its expanded naval capabilities and operational deployments may eventually produce more parallelism in intelligence operations and greater interest in reducing operational risks through mutual restraint.) Some of the more coercive approaches require violating preferred U.S. norms of freedom of navigation and U.S. military standard practice of safe airmanship and seamanship to generate the leverage necessary to alter Chinese behavior. This risks shifting international norms in undesired directions and would certainly create greater tension and friction in military relations with the PLA and perhaps also in broader bilateral relations. U.S. policymakers will need to carefully consider whether the status quo is tolerable, the costs and risks of various approaches, and what mix of policies might move China in desired directions at an acceptable cost. There is some logic to beginning with softer, more cooperative policy options and holding more coercive options in reserve in case cooperative options fail or Chinese harassment increases. However, some might argue that the United States has already employed some soft options with limited results.

Notes

¹ See Kenneth Lieberthal and Wang Jisi, *Addressing U.S.-China Strategic Distrust*, John L. Thornton China Center Monograph Series, No. 4 (Washington, DC: The Brookings Institution, March 2012).

² In addition to China, other noteworthy countries that have issued reservations about what activities should be allowed inside Exclusive Economic Zones (EEZs) include Brazil and India.

³ For U.S. and Chinese legal perspectives on the issue, see, for instance, Peter A. Dutton, ed., *Military Activities in the EEZ: A U.S.-China Dialogue on Security and International Law in the Maritime Commons*, China Maritime Studies Institute, No. 7 (Newport, RI: Naval War College, December 2010),

available at <www.usnwc.edu/Research---Gaming/China-Maritime-Studies-Institute/Publications/documents/China-Maritime-Study-7_Military-Activities-in-the-.pdf>.

⁴ For an overview, see Sherry Sontag and Christopher Drew, *Blind Man's Bluff: The Untold Story of American Submarine Espionage* (New York: PublicAffairs, 1998).

⁵ Kevin Pollpeter, *U.S.-China Security Management: Assessing the Military-to-Military Relationship* (Arlington, VA: RAND, 2004), 20–21.

⁶ Kurt Campbell and Richard Weitz, “The Limits of United States–China Military Cooperation: Lessons from 1995–1999,” *Washington Quarterly*, vol. 29 (Winter 2005–2006), 174.

⁷ The Western Pacific Naval Symposium (WPNS) initiative, started in 1988, provides a forum for enhancing cooperation and understanding among naval professionals from Pacific Rim countries and those countries with significant national interests in the Pacific region. By 2010, WPNS included 20 member nations and four observer nations.

⁸ “Code for Unalerted Encounters at Sea,” Review Supplement, June 2003, section 1.1.

⁹ *Ibid.*, section 1.2.

¹⁰ *Ibid.*, section 1.11.

¹¹ Additional information regarding Convention on the International Regulations for Preventing Collisions at Sea can be found on the International Maritime Organization Web site, available at <www.imo.org>.

¹² Peter A. Dutton, “Caelum Liberam: Air Defense Identification Zones Outside Sovereign Airspace,” *American Journal of International Law*, vol. 103 (2009), 692.

¹³ See, for instance, comments by former Secretary of Defense Donald H. Rumsfeld in Dutton, “Caelum Liberam,” 706.

¹⁴ U.S. officials have also commented on the routine nature of Chinese intercepts of U.S. surveillance aircraft. Some adherence to basic norms of airmanship on the part of the Chinese is implicit in the mention of routine intercepts with no reported problems. See, for instance, Kevin Baron, “Pentagon says Chinese shadowing of U-2 plane not unusual,” *Stars and Stripes*, July 27, 2011, available at <www.stripes.com/blogs/stripes-central/stripes-central-1.8040/pentagon-says-chinese-shadowing-u-2-plane-not-unusual-1.150351>.

¹⁵ For purposes of this paper, surveillance operations will include military survey operations as well.

¹⁶ M. Taylor Fravel and Alexander Liebman, “Beyond the Moat: The PLAN’s Evolving Interests and Potential Influence”; and Daniel M. Hartnett and Frederic Vellucci, “Toward a Maritime Security Strategy: An Analysis of Chinese Views Since the Early 1990s,” in *The Chinese Navy: Expanding Capabilities, Evolving Roles*, ed. Phillip C. Saunders et al., 41–80, 81–108 (Washington, DC: NDU Press, 2011).

¹⁷ Dutton, “Introduction,” in *Military Activities in the EEZ*, 4.

¹⁸ Thomas C. Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1981), chapter 8; and *Arms and Influence* (New Haven: Yale University Press, 1966), chapter 3.

¹⁹ March 2011, Beijing.

²⁰ David F. Winkler, *Cold War at Sea: High-Seas Confrontation between the United States and the Soviet Union* (Annapolis: Naval Institute Press, 2000).

²¹ *Ibid.*, 14.

²² James Bamford, “Clandestine Air War: The Truth Behind Cold War US Surveillance Flights,” *Harvard International Review* (Winter 2002). For additional information regarding U.S.

aerial reconnaissance missions against the Soviet Union during the Cold War, see Dino A. Brugioni, *Eyes in the Sky: Eisenhower, the CIA and Cold War Aerial Espionage* (Annapolis: Naval Institute Press, 2010); and Larry Tart and Robert Keefe, *The Price of Vigilance* (New York: Ballentine Books, 2001).

²³ Winkler, *Cold War at Sea*, 28–40.

²⁴ Ibid., 68.

²⁵ Ibid., 63.

²⁶ Ibid., 68.

²⁷ Ibid., 173. See also Ronald J. Kurth, “Gorshkov’s Gambit,” in “The Cold War at Sea: An International Appraisal,” *The Journal of Strategic Studies* 28, no. 2 (April 2005), 261–280.

²⁸ Ibid., 7.

²⁹ Ibid., 91

³⁰ David F. Winkler, “The Evolution and Significance of the 1972 Incidents at Sea Agreement,” *The Journal of Strategic Studies* 28, no. 2 (April 2005), 361–377.

³¹ The People’s Liberation Army Navy has just established a 14-day training program at the Naval Command College in Nanjing for commanders headed to the Gulf of Aden for counterpiracy operations.

³² Winkler, *Cold War at Sea*, 25, 61. Winkler cites Soviet concerns about negative international perceptions stemming from their shoot-downs of U.S. aircraft in the early phases of the Cold War and more aggressive maritime harassment actions in the late 1960s. This latter issue was exacerbated by Soviet sensitivity to world public opinion following their 1968 invasion of Czechoslovakia.

³³ However, in a March 2012 dialogue, one PLA officer noted that China needs to place greater emphasis on “bottom-up” approaches to help manage competitive dynamics.

³⁴ For a persuasive argument that great powers tend to develop blue water naval capabilities, see Peter M. Swartz, “Rising Powers and Naval Power,” in *The Chinese Navy: Expanding Capabilities, Evolving Roles*, 1–22.

³⁵ See World Trade Organization economic figures.

³⁶ For estimates, see “Sea Change in Thinking About China’s Navy,” *China Daily*, April 23, 2009; and Bernard Cole, *Great Wall at Sea*, 2nd ed. (Annapolis: Naval Institute Press, 2010). In 2009, 6 of the world’s 10 busiest ports were in China. See United Nations Conference on Trade and Development, Review of Maritime Transport 2009.

³⁷ The White House, “U.S.-China Joint Statement,” January 19, 2011, available at <www.whitehouse.gov/the-press-office/2011/01/19/us-china-joint-statement>.

³⁸ Dan Blumenthal and Aaron Friedberg, *An American Strategy for Asia: A Report of the Asia Strategy Working Group* (Washington, DC: American Enterprise Institute, January 2009).

³⁹ Chinese military officers and analysts also view the potential for incidents and accidents in the Taiwan Strait to escalate as limited; this reduces their assessment of the practical value of cross-strait confidence-building measures. See Phillip C. Saunders, “Project Strait Talk: Security and Stability in the Taiwan Strait,” Center for Nonproliferation Studies, Monterey Institute of International Studies, July 27, 2000; and Bonnie Glaser, “Building Trust Across the Taiwan Strait: A Role for Military Confidence-building Measures,” Center for Strategic and International Studies Freeman Chair Report, January 2010,

available at <http://csis.org/files/publication/100107_Glaser_BuildingTrust_Web.pdf>.

⁴⁰ See Desmond Ball, "Intelligence collection operations and EEZs: the implications of new technology," *Marine Policy* 28, no. 1 (January 2004), 67–82.

⁴¹ See National Institute for Defense Studies (NIDS), *NIDS China Security Report 2011* (Tokyo: NIDS, March 2011), available at <www.nids.go.jp/english/publication/chinareport/pdf/china_report_EN_4C_A01.pdf>; and Tetsuo Kotani, "Freedom of Navigation and the US-Japan Alliance: Addressing the Threat of Legal Warfare," U.S. Japan Papers (New York: Japan Center for International Exchange, December 2011), for further discussion on the operations of Chinese maritime assets in and through Japan's recognized and disputed EEZs.

⁴² One should note, however, that the history of multilateral maritime initiatives of this type is poor. Efforts to expand Incidents at Sea Agreement results into a multilateral venue, along with a multilateral maritime confidence-building regime instituted as a part of the Middle East Peace Process, both collapsed under the weight of broader political issues.

⁴³ See "Lourdes [Cuba] Signals intelligence facility," *Global Security.org*, available at <www.globalsecurity.org/intell/world/cuba/lourdes.htm>; and Manuel Cereijo, "Cuba and Information Warfare," available at <www.amigospais-guaracabuya.org/oagmc207.php>.

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